



Tinytag Ultra 2 External Temperature (-40 to +125°C)

TGU-4020

Issue 3 17th February 2006 E&OE The Tinytag Ultra 2 data loggers are ideally suited to monitor interior applications where there is little or no moisture.

Tinytag Ultra 2 data loggers have a high reading accuracy and resolution, large memories, a fast offload speed and a low battery monitor.

The TGU-4020 uses an external probe (not included) to record temperature in awkward to reach areas or applications where a fast time response is required.

Popular Applications

- · Office and housing monitoring
- Pharmaceutical manufacture
- Dry food storage
- Museum display and repository
- Incubators

Features

- Temperature recorder
- 32,000 reading capacity
- High accuracy
- High reading resolution
- Fast data offload
- · Splash-proof case
- · Low battery monitor
- User-replaceable battery



















Tinytag Ultra 2 External Temperature (-40 to +125°C)

TGU-4020

Issue 3: 17th February 2006 (E&OE)



Features

Stop Options

Total Reading Capacity 32,000 readings
Memory type Non Volatile
Delayed Start Relative / Absolute
(up to 45 days)

When full

After n Readings

Never (overwrite oldest data)

Reading Types Actual, Min, Max
Logging Interval 1 sec to 10 days
Offload While stopped or when

logging in minutes

mode

Alarms 2 fully programmable;

latchable

Reading Specification

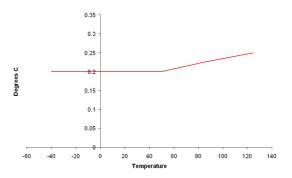
 $\begin{array}{lll} \textbf{Reading Range} & -40^{\circ}\text{C to } +125^{\circ}\text{C} & (-40^{\circ}\text{F to } +257^{\circ}\text{F}) \\ \textbf{Sensor Type} & 10\text{K NTC Thermistor} \end{array}$

(external probe)

Reading Resolution 0.02°C or better

 $\begin{tabular}{ll} \textbf{Temperature Stability} & \pm 0.01 ^{\circ} \text{C}/^{\circ} \text{C change from } 25 ^{\circ} \text{C} \end{tabular}$

Logger Accuracy*



^{*}The overall accuracy of this unit will depend on the probe used.

Physical Specification

IP Rating IP54 splash proof (see notes)
Operational Range* -40°C to +85°C (-40°F to +185°F)
Case Dimensions

 Height
 72mm / 2.83"

 Width
 60mm / 2.36"

 Depth
 33mm / 1.30"

 Weight
 55g / 1.94oz

Notes

Battery Type SAFT LS14250 or LST14250;

Tekcell SBAA02P

The logger will operate with other ½AA 3.6V Lithium (Li-SOCI2)

batteries but performance cannot be guaranteed.

Replacement Interval Annually

Before replacing the battery the data logger must be stopped.

Data stored on the logger will be retained after a battery is

replaced.

If used at low temperatures the data logger should be allowed to warm to room temperature before it is opened to avoid

condensation forming inside the unit.

The IP54 rating is valid only when the unit's connector cap and probe are fitted and the unit is orientated with it's hanging tab uppermost.

Calibration

This unit is configured to meet Gemini's quoted specification during its manufacture.

We recommend that the calibration of this unit should be checked annually against a calibrated reference meter.

A UKAS traceable certificate of calibration can be supplied for an additional charge either at the point of purchase, or if the unit is returned for a service calibration.

Approvals

This equipment complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause any harmful interference, and (2) the device must accept any interference received, including interference that may cause undesired operation.

This product is manufactured by Gemini Data Loggers (UK) Ltd to BS EN ISO9001:2000 (Certificate No. 6134) and is approved to EN61326:1998 with any standard leads or probes supplied.





Required and Related Products

To use this data logger you will also require:

One of the following probes:

PB-5001-1M5/3M/5M: Standard Thermistor Probe or PB-5002-1M5/3M/5M: Fast Response Thermistor Probe or PB-5003-1M5: Surface Thermistor Probe

The following software:

SWCD-0040: Tinytag Explorer software (version 4.2 or above recommended).

and a

CAB-0007: Tinytag PC Serial Download Cable

Further related products:

CAB-USB: USB to Serial Converter SER-9520: Tinytag Ultra Service Kit

^{*}The Operational Range indicates the physical limits to which the unit can be exposed, not the reading range over which it will record.